

EÖTVÖS LORÁND UNIVERSITY FACULTY OF HUMANITIES
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PhD DISSERTATION

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THE EARLY COPPER AGE IN THE KÖRÖS REGION

SUMMARY

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GOALS OF THE DISSERTATION

Due to extensive research at tell sites, the study of the Late Neolithic on the Great Hungarian Plain has been ongoing for decades. As a result, significant advances have occurred in the clarification of historical processes, chronological and cultural relations, and exchange networks of the region during this period. However, the subsequent era, the Early Copper Age, has been one of the most neglected fields of the Hungarian prehistoric research. Owing to the Archaeological Topography of Hungary project (MRT) since the 1960's, the research of the Archaeological Institute of the Hungarian Academy of Sciences in the Gyomaendrőd microregion in the 1990's, several rescue excavations in the last two decades, and especially the systematic work of the Körös Regional Archaeological Project since the end of the 1990's, the Hungarian part of the Körös region now offers a unique opportunity for the complex study of the Tiszapolgár culture.

This dissertation focuses primarily on the comprehensive investigation of the social and economic organization of the Early Copper Age communities in the Körös region, and on the reconstruction of the processes that occurred during the transitional period between the Late Neolithic and the Early Copper Age, which eventually gave rise to the Tiszapolgár culture ca. 4500 cal BC. The structure of the dissertation, the subjects of the individual chapters and their methodological approaches serve these purposes. In addition, the dissertation intends to demonstrate the efficiency of regional-scale archaeological research as a methodological tool in the recognition of the prehistoric socioeconomic and cultural processes.

RESULTS

SETTLEMENT ORGANIZATION

During the MRT project, 391 Early Copper Age settlements were mapped in an area of 3798,5 km² of the northern part of Békés county. An opportunity to study Early Copper Age settlement organization in the Körös region from an *ecological* point of view is provided by overlaying the spatial distribution of sites with that of soil types, as well as with the recently published paleohydrological reconstruction of the region. Subsequently, settlement clusters identified in the landscape were utilized for investigating *social* organization. The area under analyses covers not only the Körös region, composed of the Körös Valley and the Körös-Berettyó interfluvial subregions, but also stretches to the northernmost part of the Maros Fan, which also was surveyed in the course of the MRT project. This makes it possible to compare characteristics of settlement organization in fundamentally different landscapes and in areas with different environmental histories. In order to gain a better understanding of the formation and the further development of the Early Copper Age settlement organization, the Late Neolithic and Middle Copper Age settlement systems in the study area were also consulted, and the results compared to the characteristics of the Early Copper Age.

The outcomes of the settlement ecological investigations at regional, subregional and microregional scales clearly suggest that, similarly to the Late Neolithic and the Middle Copper Age, among the environmental factors the locations of the settlements were influenced primarily by proximity to active or inactive watercourses. Microregions covered with the most favorable soil types but without waterways were inhabited very sparsely in all studied periods. However, in different subregions of the Körös region the Early Copper Age settlements were established in different environments: in the Körös Valley the majority of the Tiszapolgár sites is found on Holocene alluviums, while in the inner parts of the Körös-Berettyó interfluvial the most frequent locations of the rather intensive Early Copper Age occupations were on the natural levees of watercourses, that are most likely Pleistocene in origin. These latter paleochannels became inactive by the Holocene but played an important role in the drainage of floods of the Old-Berettyó river.

In contrast to the Körös region the northern part of the Maros Fan remained nearly entirely uninhabited up to the Middle Iron Age. Although the region is characterized by fertile soils and extensive grasslands, there were no active rivers in this area during the Holocene. The almost complete lack of occupation of the Maros Fan in the Early Copper Age might have been related to the unsuitability of the subsistence strategies based on rivers, and on the natural resources and possibilities of their immediate environment in this territory. The fact that in the Holocene the ancient paleochannels of the Maros Fan did not integrate with the Körös watersystem, which played a remarkably significant role in community interactions, may also have contributed to this phenomenon.

The settlement historical data indicate that the appearance of settlements in large numbers at the beginning of the Early Copper Age in several previously uninhabited or sparsely inhabited microregions of the Körös region may have been related to the intensive use and eventual exhaustion of some natural resources around large Late Neolithic settlements. This process may have contributed to the dissolution of the settlement organization in the latest phase of the Neolithic.

In contrast to the relatively similar distributions of the Early Copper Age, Late Neolithic and Middle Copper Age settlements in terms of environmental variables, the comparative analysis of the settlement organizations of these periods in the study area from social aspects revealed fundamental differences.

The most relevant characteristic of the Late Neolithic settlement organization on the Great Hungarian Plain is centralization. Smaller settlements were tethered to a tell or a large horizontal site, their distribution and relocation in a particular area of the landscape were determined by these centers. In the Körös region several kilometers of uninhabited land, with similar environmental characteristics to the populated microregions, can be inferred between each cluster. This pattern might be related to the active maintenance of boundaries between settlement clusters. Each isolated cluster may have corresponded to a smaller or larger social unit.

At latest by the end of the Neolithic period tells and large horizontal sites in the study area were abandoned. However, the complete dissolution of the Late Neolithic settlement organization in the Körös region cannot be assumed, for the Early Copper Age sites were organized again in clusters, frequently in those areas of the preceding territorial units. This suggests some continuity in social organization over time. The Early Copper Age settlement clusters, like their Late Neolithic counterparts, were located along major rivers and their tributaries, but were composed of many more sites than those of the Late Neolithic. The clusters established in the preceding period persisted without exception in the Early Copper Age, but they covered larger areas. The uninhabited zones, which were often wider than 10 kilometers in the Late Neolithic, became remarkably narrower, and the borders of the clusters can hardly be discerned in several microregions. Another significant difference compared to the Late Neolithic is that centralized organization in the Early Copper Age settlement system can no longer be recognized. The Bodrogkeresztúr period appears to have represented the decay of the settlement organization that had been established in the Late Neolithic and then altered considerably in the Early Copper Age. Settlement clusters, particularly in the western portion of the study area, still can be identified, in most parts of the Körös region this sort of organization might have ceased to exist.

SETTLEMENT STRUCTURE AND USE

The size and structure of settlements provide substantial information about the social and economic organization of communities. Based on their horizontal and vertical extents, the layout of the built environment and its individual characteristics, inferences can be made regarding the scale, and the way of life of inhabitants. The application of various analytical methods also allows the study of how the members of particular communities organized within their immediate space, and where and how they carried out everyday activities.

The results of the complex investigations made in the framework of the Körös Regional Archaeological Project at Vésztő-Bikeri, Körösladány-Bikeri and Okány-Futás, the large-scale rescue operations at Gyula-Remete-Iskola, and the systematic surveys conducted at 17 more sites in the study area made possible the thorough exploration of the structure and use of the Early Copper Age settlements not only in the Körös region but also throughout the entire territory of the Tiszapolgár culture.

In addition to the more than six-fold increase in the number of sites compared to the Late Neolithic in the Körös region, the alteration in the size of the sites is also remarkable; the average area of the Tiszapolgár settlements is one-third to one-fifth of that of the preceding period. The data on the inner structure of the Late Neolithic tells and large horizontal settlements of the Great Hungarian Plain may contribute to the understanding of the establishment and use of the small Early Copper Age sites. Studies of Late Neolithic settlements have often revealed spatially isolated, extended-family based household clusters each consisting of several domestic structures and associated features (e.g., Berettyóújfalu-Herpály, Hódmezővásárhely-Kökénydomb, Hodoni/Hodonyi). The small-scale communities of these clusters might have been the units of mobility during the period both within and outside of settlements. It is assumed that the origin of the Early Copper Age settlements can also be traced back to these units. In this scenario the small-scale Tiszapolgár settlements were the structural

and functional equivalents of the Late Neolithic kin-based groups that had abandoned the large Late Neolithic sites. In some regions the secession of the household clusters from the tells and large horizontal sites might have begun as early as in the earlier phases of the Late Neolithic. The fact that, according to the current state of research, there are no known tell-sites that survived into the final phase of the Tisza culture in the Körös region may indicate that this process might have started earlier in this area than in other parts of the Great Hungarian Plain.

Investigations at Early Copper Age sites of the Körös region in the past decade opened up new opportunities to get a more representative view of the operation of the Tiszapolgár settlements. The results suggest that the layout and use of settlements of the era followed a rather uniform pattern, which bears resemblances to the Late Neolithic household clusters observed many times on the Great Hungarian Plain. In the central area of many sites 2-3 buildings, often longhouses, might have stood at any given time, surrounded by features of everyday activities. The animal stock of the community, as well as considerable part of domestic waste were located in the periphery of the site. Our recent data suggest that in addition to the short-lived ones, settlements with thick stratigraphy, inhabited even for few generations also continued to exist at the dawn of the Copper Age.

Based on observations taken in the Körös region and in other parts of the Great Hungarian Plain, in contrast to the earlier assumptions, the establishment of defensive structures around settlements also persisted into the Early Copper Age. The structural antecedents and nearly contemporary analogies of the enclosures excavated at the Tiszapolgár sites in the study area are well-known from throughout the Carpathian Basin. The locations of the Vésztő and Körösladány sites within the Early Copper Age settlement system suggest that fortification of settlements might have been particularly frequent along the frontier zones of larger-scale sociopolitical units, and indicate violent conflicts between groups of adjacent microregions. The substantial labor investment in the creation of enclosures confirms the active cooperation of the smaller communities of larger social units, indicating a considerable level of interaction between different sites.

Results from the typical, 0,5-1 ha large Tiszapolgár sites do not exhibit household clusters, suggesting that there was not an additional structural level between household and the settlement as a whole. However, the results of systematic surveys conducted at extraordinarily large (tens of hectares) Early Copper Age sites in the outskirts of Geszt in the easternmost portion of the Körös Valley likely refer to isolated household clusters within the big settlements. This observation could point to the reoccurrence of processes of nucleation, and the reunion of more or less autonomous, small-scale communities. But this phenomenon did not become an overall tendency in the Körös region, as it had during the Late Neolithic. Rather, it remained a geographically isolated and temporally short-lived phenomenon. Based on currently available data, these aggregational phenomena may have been associated with the economic significance of particular settlements in a given region (e.g., in trade of lithics), or with social groups that coalesced for special purposes (e.g., warfare). These processes may have led to the restricted, both in terms of time and space, reorganization of microregional-level settlement system.

MORTUARY CUSTOMS

There are 53 presumably Early Copper Age graves from 12 sites in the Körös region. Based on grave-goods, 46 of them can securely be dated to this period. The evaluation of the data on burials is largely influenced by the fact that more than half of these graves was found in a heavily disturbed condition.

Reserving the possibility that certain traditions are not yet known, on the grounds of the currently available information the locations of the burials in the Early Copper Age Körös region were as follows:

Formal cemeteries isolated from settlements. As opposed to the Tisza region, Northern Hungary and Eastern Slovakia Tiszapolgár cemeteries securely established as separate from settlements have not yet been revealed in the study area. The graves of Okány-Baromfitelep came to light near an Early Copper Age settlement.

Graves buried within settlements during occupation. This tradition, likely employed throughout the entire Tiszapolgár area, might have been practiced in the Körös region during the whole period. Following the Late Neolithic traditions of the Great Hungarian Plain both adults and children were buried in the uninhabited parts of the settlements, mostly at their margins (e.g., Endrőd-Hegedűs-tanya, Endrőd-Polyák-alja, Gyula-Remete-Iskola, Bélmegeyer-Mondoki-domb).

Graves buried in settlements after their abandonment. In the Körös region the practice of placing the deceased at abandoned Early Copper Age sites might have been utilized extensively and in the entire period. However, larger cemeteries used for longer time were not established at these locations. Based on the current data, members with somehow different or lower status in the smaller-scale communities may have been laid to rest at the former settlements. It is also likely that at Vésztő-Mágor the presumably formal, long-lasting and larger cemetery was established after the abandonment of the settlement occupied earlier in the period. Within this cemetery, groups of graves, organized for example by age-cohorts, also may be assumed.

Although by the Early Copper Age uniform mortuary customs can be recognized throughout a large geographic area, and compared to the graves of the preceding period on the Plain the practices of grave-good deposition also changed (e.g., the number of grave-goods increased considerably, new artifact types appeared), the survival of some Neolithic traditions also is noticeable. In the study area the formal orientation of the burials, the utilization of ochre in mortuary ceremonies, and the occurrence of polished stone tools and boar tusk pendants as prestige goods can be mentioned in this respect.

The Early Copper Age mortuary customs in the Körös region shared the same traditions that were followed in other regions of the territory of the Tiszapolgár culture as well. Although in the study area differences can be detected neither in major elements of the applied rites nor in grave-good deposition between smaller-scale geographic areas, at the regional level there is a characteristic phenomenon, namely the special role of shells in burial rituals, that appears to have been a widespread, more or less consistent practice in the Early Copper Age communities of the Körös region. This custom is unknown from other provinces of the Tiszapolgár area. In addition, for the present baby burials covered with pots also are restricted to this region. These phenomena might represent unique practices in the context of the highly standardized burial customs of the Tiszapolgár culture, and may indicate novel traditions in the Körös region that mirror cultural differences.

The differences in the practices of grave-good deposition between burials recovered from settlements and Vésztő-Mágor (and to some extent from Okány-Baromfitelep) may suggest the possibility of co-existence of communities with distinct social statuses in the Early Copper Age Körös region. In the case of the Mágor tell, the presumably symbolic location of the rich cemetery related to the ancestors could support such an interpretation. However, neither the mortuary analyses nor the investigations of settlement organization and settlement use imply strictly formalized social complexity tending towards chiefdoms, or the appearance of inherited social ranking. Different statuses among communities, indicated by the locations of burials and the practices of grave-good deposition, may have been associated with the actual or suggested descent, and the intention of a particular group (e.g., lineage) to declare their leading social role, or efforts to have this position approved by other communities of the region.

CHRONOLOGY

In the Körös region calibrated radiocarbon dates derive from five Early Copper Age sites. The results of the analyses indicate that the earliest occupational phases of Vésztő-Bikeri and Körösladány-Bikeri were 1) contemporary with the latest Neolithic and the Prototiszapolgár phases at the Berettyóújfalu-Herpály tell, and 2) nearly contemporary with the end of the habitation at Polgár-Bosnyákdomb, 3) earlier than the other available Early Copper Age data from the Great Hungarian Plain. In addition, the ceramic assemblages from these settlements do not represent the Prototiszapolgár phase, they reflect the types and decorative styles of the developed Tiszapolgár culture. All these demonstrate on one hand that the formation of the Tiszapolgár culture took place at different paces in the various parts of the Great Hungarian Plain and took approximately a century. On the other hand, the culture might have developed earlier in the Körös region than in other regions, and could have had an impact on the transformation of the material culture of adjacent areas.

SUBSISTENCE

The comprehensive research carried out at Early Copper Age settlements in the study area during the past decade provides a unique opportunity to gain a better understanding of the subsistence practices of the period in the Great Hungarian Plain. The faunal remains recovered from Körösladány-Bikeri, Vésztő-Bikeri and Gyula-Remete-Iskola are the largest analyzed assemblages from the territory of the Tiszapolgár culture. Apart from the

sample-size it is also remarkable that while analyzing the assemblages of two adjacent settlements inhabited sequentially, Körösladány-Bikeri and Vésztő-Bikeri, changes in subsistence strategies in a given microregion over the Early Copper Age can be investigated. Further, the comparison of these results with the data from Gyula-Remete-Iskola opens up the possibility of studying the economy in different areas of the Körös region characterized by diverse environmental conditions. In the course of the excavations, macrobotanical remains were found at Vésztő-Bikeri and Körösladány-Bikeri. For the dissertation only the results of the analyses of the Vésztő assemblage were available.

Previous assumptions based on sparse data emphasized the substantial modification of the subsistence practices and the increased significance of cattle breeding over agriculture by the Early Copper Age on the Great Hungarian Plain. However, the currently available faunal and archaeobotanical data, which derive almost exclusively from the southern part of the Plain, imply that the Late Neolithic food-producing economy based decisively on agriculture and animal husbandry continued to persist in the beginning of the Copper Age, and any substantial, overall shift in either of the subsistence modes cannot be inferred. Instead, analyses of large, systematically collected assemblages illustrate that the economy of communities living on the Great Hungarian Plain during the Early Copper Age, among other factors, was affected especially by the characteristics of the neighboring and broader environment of the occupation.

The most prominent difference between the economies of the Late Neolithic and the Early Copper Age of the Great Hungarian Plain may have been the rising importance of animal husbandry over hunting. In contrast to the previous hypotheses, the increasing significance of cattle breeding in animal husbandry of the Early Copper Age can not be verified. Moreover, in some regions, for instance in the inner parts of the Körös region, the relative frequency of the cattle in the assemblages may have decreased considerably. The importance of pigs in subsistence appears to have varied by settlement, while the overall frequency of the caprovines might have increased by the Early Copper Age.

The evaluation of written historic resources and the results of experimental archaeological investigations suggest that areas potentially suitable for cultivation in the Körös region before the large-scale regulation of the water system was remarkably extensive. Consequently, this factor by itself, contrary to some previous assumptions, could not have resulted in the periodic movement of settlements during the Early Copper Age. Apart from extensive agriculture, the legumes found regularly among the macrobotanical remains of the Late Neolithic and Early Copper Age sites of the Great Hungarian Plain were grown more intensively in gardens nearby the settlements. An overview of the data known from the territory of the Tiszapolgár culture suggests that the improved, complex agriculture of the Late Neolithic continued in the subsequent period as well.

The inner parts of the Körös region were characterized by a mosaic environment of marshes, perennially inundated areas, major and minor rivers as well as drylands with smaller and larger extents in the Holocene. The adaptation to this dynamically altering landscape required prehistoric communities of the region to apply diverse subsistence strategies; that is, a heterogeneous mixture of domesticated plants and animals. At the same time, the overwhelming predominance of cattle bones in the faunal assemblage of Gyula-Remete-Iskola might have been associated with the broader environment of the site, namely that it was located close to the hydrologically more balanced, drier Maros fan with grasslands that offered favorable conditions for large-scale animal herding.

CONTACTS

In order to study the regional-scale and macroregional-scale interaction of the Early Copper Age communities in the Körös region the results of the stylistic, petrographic and geochemical analyses of ceramic assemblages were utilized. The directions and the intensity of interregional-scale contacts were investigated by provenience analyses of lithics as well as other possible foreign artifact types, such as polished stone tools, metal and ceramic objects, recovered from Tiszapolgár settlements of the study area.

Earlier models posited widespread, intensive interaction at interregional-scale at the beginning of the Copper Age on the Great Hungarian Plain. As opposed to these suggestions, the analyses of the lithic assemblages found at Tiszapolgár sites in the Körös region imply a considerable decline in the total amount of imported raw materials and the shrinkage of the geographical extent of interregional interaction. Recognizable already during the final phase of the Late Neolithic, this decline persisted into the Early Copper Age. The moderate number of

raw materials from the Banat, the Balkans and Transdanubia indicates a significant brake in interaction between the Early Copper Age communities of the southern Plain with those to the south and west. However, the presence of lithic raw materials from Northern Hungary, such as obsidian, Mátra hydroquartzites and Mezőzombor limnoquartzites, suggests that connections to the north continued to persist in this period. The extension of contacts stretching as far as to the Prut and Dniester Valleys is implied by the fact that Volhynian flint occurs in relatively high frequencies at Early Copper Age sites in the Körös region.

The changes in the organization and intensity of interregional exchange networks, which started at the end of the Neolithic, coincided with fundamental alterations in settlement organization by the middle of the 5th millennium BC. During the Late Neolithic, tells and large horizontal settlements had assumed a central role in the coordination and maintenance of the interregional contacts and the circulation of raw materials and goods. The abandonment of these sites at the end of the Neolithic resulted in the removal of these nodes, which were critical to the continuous functioning of the system. The Early Copper Age network consisted of smaller communities without focal sites that were more evenly dispersed across the landscape and, as is indicated by the various ceramic analyses conducted in samples from the study area, they interacted more intensively with their nearest neighbors and adjacent microregions. Since the Körös region is located far from the sources of raw materials and their primary manufacturing zone, and this area represented the peripheral zone of the trade network of the Carpathian Basin in this period, the raw materials and goods would have been transmitted into the region via down-the-line exchange, particularly along major rivers. However, the data from the Geszt-Szalontai-zug and Geszt-Szalontai-földek sites, especially their unusually large size and the remarkable amount of lithics collected during systematic surveys, could allow the assumption that settlements with specialized, central roles in coordination of regional-scale and/or interregional-scale interaction could have been re-established during the Early Copper Age. The relative proximity of the Geszt sites to Transylvania may imply that these settlements could have been located primarily on the margin of the Great Hungarian Plain, along the major transportation routes.

CONCLUSIONS

In the middle of the 5th millennium BC relatively rapid changes took place on the Great Hungarian Plain and adjacent regions. During the past few decades numerous hypotheses have been proposed to explain these fundamental alterations that affected nearly all aspects of social life. However, these assumptions have remained unverifiable due to the lack of systematically collected data in adequate quantity and quality from Early Copper Age settlements. Indeed, the results of multi-disciplinary, systematic research carried out at Tiszapolgár sites of the Körös region, and the evaluation of further relevant data on the Late Neolithic and the Early Copper Age of the Great Hungarian Plain have, for the first time, created the right conditions for modelling the changes between the Neolithic and Copper Age in the eastern part of the Carpathian Basin, as well as for the reconstruction of the way of life in the Early Copper Age.

The results of the ecological and social analyses of the settlement organization conducted at the scale of the study area indicate particular processes that led to the collapse of the Late Neolithic settlement system. This tightly clustered, centralized system utilized only relatively small areas in the Körös region that might have eventually necessitated the inhabitation of previously unoccupied areas. The abandonment of large Late Neolithic settlements composed of larger-scale social units, and the establishment of autonomous settlements of small-scale communities in new, formerly uninhabited, remote areas that frequently served as border zones between settlement clusters in the Late Neolithic, may have led to the transformation of the territorially rigidly integrated settlement units into a more dispersed system, and to the breakdown of the previous, multi-tiered social structure. However, as the spatially discrete settlement clusters of the Körös Valley imply, the awareness of belonging to a given larger social unit as well as the territorial integrity of a particular group might have prevailed in the Early Copper Age as well.

The research on settlement structure based on excavations, systematic surveys, geophysical and geochemical analyses, as well as on spatial distributions of various artifact types suggests that uniform patterning and significant regularity can be observed in the organization and use of the Early Copper Age, ca. 1 ha large settlements of the Körös region that resemble the operation of household clusters identified at Late Neolithic settlements on the Great Hungarian Plain. The tradition of building longhouses with foundation ditches and the

long-term, frequently multigenerational use of settlements also indicate a continuous tendency with the preceding period.

In mortuary customs the continuity with the Late Neolithic appears to be remarkably strong. The practices of deposition of grave-goods in burials placed within settlements and in presumably formal cemeteries differed significantly. This may indicate changes in mortuary customs over time, namely practices modified after the establishment of formal cemeteries. Based on the quantity and quality of grave-goods, however, this phenomenon also may refer to social differences between smaller-scale communities or the intention of its declaration. Thus, it is possible that in some parts of the Great Hungarian Plain the establishment of formal cemeteries may have been linked to the occurrence of a special form of social inequality based rather on descent than on wealth. The various investigations that aimed to study the burial practices, settlement organization and settlement structure of the Early Copper Age do not have implications of the consolidation of social inequality based on wealth, or the establishment of inherited rank on the Plain.

The studies of the Early Copper Age economy of the Körös region suggest that the subsistence strategies of the period were characterized by significant heterogeneity, and were based primarily on rivers and the diverse resources of their neighboring environment. On the grounds of the results of the analyses of faunal assemblages recovered from settlements located both in the central and the marginal parts of the study area, the considerable differences recognized in the economies of various microregions might have largely been associated with different environmental characteristics. The currently available data firmly seems to contradict the earlier assumptions about a general shift to pastoralism and to the mobile way of life on the entire Great Hungarian Plain, indeed, they indicate remarkable similarities between the Late Neolithic and the Early Copper Age subsistence strategies.

The regional-scale analysis of interaction of the Early Copper Age communities of the Körös region suggests relatively tight territories, a maximum of several ten kilometers in extent, with intensive direct contacts. In this system contacts based on reciprocity, either ceremonial or trade, would have prevailed. Besides economic reasons, the necessity of demographic reproduction might have also reinforced the significance of active interaction. The more permeable social boundaries between the Early Copper Age groups as well as the increasing intensity of interaction may have given rise to the homogenization of the material culture in the Great Hungarian Plain.

As a result of the dissolution of the centralized Late Neolithic settlement system the trade networks might also have been transformed. Compared to the data from the Late Neolithic sites of the southern part of the Great Hungarian Plain, the raw materials and products of remote regions clearly arrived at Early Copper Age communities of the Körös region in significantly smaller quantities, and the geographic origin of these goods also shrank considerably. Based on the spatially distinct composition of the lithic assemblages from the study area, it is suggested that the communities of different microregions participated in long-distance trade networks directed towards different sources. This phenomenon could have been related to the persistence of Late Neolithic social boundaries and network of interaction to a certain degree during the subsequent period in the region. One of the most important reasons for the violent conflicts between communities in the Early Copper Age, indicated by the Bikeri enclosures, may have been the efforts to acquire the various, frequently rare, exotic goods.

The overall shifts in the middle of the 5th millennium and the processes described above might have not taken place in a short time and for the same reasons across the Plain. It is more likely that they ran their courses at different paces, in different ways and during different periods in the various parts of the Great Hungarian Plain. As a result of these complex processes, the inner part of the Plain, including the Körös region, lost its previous prominence in the social and economic development of the Carpathian Basin.

The analyses presented in the dissertation make it possible a more precise understanding of the way of life of the communities inhabiting the Great Hungarian Plain in the Early Copper Age. The results demonstrate a much stronger continuity between the Late Neolithic and the Early Copper Age than had previously been assumed in terms of the layout and use of settlements, social organization, mortuary customs and ritual practices, and in subsistence strategies. On the other hand, the analyses also revealed themes in which the Late Neolithic development broke off and social processes moved in other directions at the beginning of the Copper Age, such as fundamental modifications in settlement organization, and substantial changes in community interactions in the Körös region.

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